REMARKS/ARGUMENTS

Claims 1-32 are pending in the present application. All are believed to be patentable for, at least, the reasons set forth herein.

REJECTIONS UNDER 35 U.S.C. 112

Claims 1-20 are rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement.

We respectfully traverse this rejection. From the disclosure on page 15 of the present application taken, as a whole, it can be seen that the cross-linked hydrophilic support referred to by the Examiner only represents an example of the genus of "hydrophilic supports". The first two paragraphs on page 15 of the present specification disclose that:

> "The support may be any support suitable for printing plates. Typical supports include metallic and polymeric sheets or foils. Preferably, a support having a metallic surface is used. Preferably, the metallic surface is oxidised. In a particularly preferred embodiment of the invention, a support having an anodised aluminium surface is employed. The support for the lithographic printing plate is typically formed of aluminum which has been grained, for example by electrochemical graining, and then anodised, for example, by means of anodising techniques employing sulphuric acid and/or phosphoric acid. Methods of both graining and anodising are very well known in the art and need not be further described herein. After writing the image the printing plate can be inked with printing ink in the normal way, and the plate can be used on a printing press. Before inking the plate can be treated with an aqueous solution of natural gum, such as gum acacia, or of a synthetic gum such as carboxymethyl cellulose, as it is well known in the art of printing.
>
> According to another mode in connection with the present invention the lithographic base with a hydrophilic surface

comprises a flexible support, such as e.g. paper or plastic film, provided with a cross-linked hydrophilic layer. A particularly suitable cross-linked hydrophilic layer may be obtained from a hydrophilic binder cross-linked with a cross-linking agent such as formaldehyde, glyoxal, polyisocyanate, melamine type cross-linkers, ammonium zirconyl carbonate, titanate crosslinkers, or a hydrolysed tetraalkylorthosilicate. The latter is particularly preferred."

In particular, attention is drawn to the first sentence of the second paragraph from which it can be seen that disclosure of a hydrophilic surface paper and hydrophilic surface plastic film are both provided with a cross-linked hydrophilic layer. Moreover, one skilled in the art would know that the anodizing techniques referred to in the first paragraph on page 15 of the present application produce a hydrophilic surface.

We therefore contend that present claims 1 to 20, complies with the requirements of 35 USC § 112, first paragraph.

REJECTIONS UNDER 35 U.S.C. 102

Claims 21 and 24-32 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kato (US 6,098,545).

Claims 21 and 28 have been amended to emphasize that the oleophilizing compound contains a single functional amidine group.

Kato fails to disclose a single functional amidine group as set forth in claims 21 and 28 and therefore the rejection under 35 U.S.C. 102(e) is improper.

Claims 24-27 ultimately depend from claim 21 and are therefore patentable for, at least, the same reasons as claim 21. Claims 29-32 ultimately depend from claim 28 are are therefore patentable for, at least, the same reasons as claim 28.

We therefore contend that claims 21 and 24-32 are novel under 35 USC § 102(e) over Kato. Removal of the rejection is respectfully requested.

REJECTIONS UNDER 35 U.S.C. 103

Claims 1-4, 6-15 and 17-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leenders et al. (US 5,501,150) in view of Boston (US 4,223,087).

The Office has rejected claims 1-4, 6-15 and 17-31 as being unpatentable under 35 USC §103(a) over Leenders et al. (US 5,501,150) in view of Boston (US 4,223,087). The Office argues that:

> "Leenders teaches a method for the preparation of a lithographic printing plate. The method comprises forming a silver image on a lithographic receiver, followed by oleophilizing the silver image by applying a compound that both oxidizes and fixes the silver image"

And further that:

"The lithographic oxidizer/fixer imparts a strong hydrophobic (i.e. oleophilic) character to the oxidized silver image, and is applied image-wise by means of ink-jet printing"

The Office admits that Leenders does not teach the amidine group-containing compounds recited in claims 1, 11 and 12.

Boston is cited as teaching a method for the preparation of a lithographic printing plate very similar to that of Leenders. The method comprises forming a silver image on a lithographic receiver, followed by oleophilizing the silver image by applying a compound that both oxidizes and fixes the silver image.

The Office repeatedly argues that the scope of the present method claim has been construed to include the fluid's being *directly* and *indirectly* dispensed on the surface of the support. In other words, onto a surface of a metallic support or onto a hydrophilic surface of a lithographic receiver which is considered to be inclusive of dispensing the oxidizing/fixing solution onto the silver-image coated, grained and anodized aluminum support. However, claim 1 of the present application discloses as filed:

"A method for the preparation of a lithographic printing plate, said method comprising dispensing information-wise by means of the ink-jet printing droplets of a fluid onto a surface of a lithographic receiver, characterized in that said fluid contains an oleophilizing compound having in its chemical structure a functional amidine group capable of <u>reacting with said surface</u> of said lithographic receiver." (Emphasis added)

i.e. the oleophilizing compound reacts with a surface of the lithographic receiver, not with any other surface. This

construction of original claim 1 is further supported by the statement at page 8, lines 14 to 17, of the present specification, which discloses that:

> "The essence of the present invention is the presence in the ink jet fluid of an oleophilizing compound having in its chemical structure a functional amidine group group **capable of reacting with the surface of the lithographic receiver.**" (Emphasis added)

We contend that the construction used by the Office of "dispensing information-wise onto" as including direct and indirect dispensing is untenable in light of these disclosures which clearly teach the direct information-wise reaction of the oleophilizing compound with a surface of the lithographic receiver. This would be impossible if the lithographic reciever were to be coated with a silver layer in an initial process step, such as envisaged in Leenders, in which a silver image is formed prior to hydrophobizing the silver image.

Leenders in claim 1 discloses:

> "Process for the manufacture of a lithographic printing plate comprising the steps of:
> (1) information-wise projecting droplets of liquid onto a receiving material having a hydrophilic surface thus bringing into working relationship on said hydrophilic surface a reducible silver compound (A), a reducing agent (B) for said silver compound and physical development nuclei (C) that catalyze the reduction of said silver compound to silver metal, and
> (2) hydrophobizing the silver image that has been obtained through said step (1)."

Since step (2) refers to step (1), step (2) must be carried out subsequent to step (1). In step (1) of the process

according to Leenders et al. a silver image is information-wise formed on the receiving material, which in step (2) is subjected to a hydrophobization step i.e. an information-wise image is produced of silver which has been hydrophobized. This means that the surface of the receiving material underneath the silver cannot have been hydrophobized since, otherwise, all the surface of the receiving material not covered by the silver image would have also been hydrophobized resulting in there being no difference in hydrophobization between the hydrophobized silver image and the hydrophobized surface of the receiving material, which would mean that a lithographic printing plate would not be produced by the process, since a lithographic printing plate requires the presence of oleophilic ink-accepting image areas surrounded by an ink-repellant water-accepting background (see Leenders at col. 1, lines 13-17).

Boston et al. in claim 1 discloses:

"A method for rendering oleophilic a surface having metallic silver in an imagewise pattern thereon comprising contacting said metallic silver with a homogeneously stable acidic aqueous salt solution comprising a ferricyanide anion and an organic cation complexing agent capable of forming a water-insoluble, oleophilic complex with oxidized silver, said cation comprising a protonated nitrogen-substituted hydrocarbon compound containing a formal imine group therein, said imine group being in resonant association with adjacent groups within said hydrocarbon compound."

The combined teachings of Leenders et al. and Boston et al. provide a first step in which droplets of liquid are projected information-wise onto a receiving material having a hydrophilic surface thus bringing into working relationship on said hydrophilic surface a reducible silver compound (A), a reducing agent (B) for said silver compound and physical development nuclei (C) that catalyze the reduction of said silver compound to silver metal, thereby forming a silver image, which in a second step is hydrophobized with an amidine compound. In this two step process the amidine compound clearly hydrophobizes the silver image resulting in an information-wise hydrophobized silver image on a receiving material having a hydrophilic surface.

However, the method of the present invention produces in a single step process an information-wise hydrophobized surface of a hydrophilic surface of a lithographic receiver i.e. an equivalent result is realized without the intermediate formation of a silver image, but in a single step process with a hydrophilic surface of a lithographic receiver being directly hydrophobized with an amidine. We therefore contend that a combination of the teachings of Leenders and Boston et al. teaches away from the present invention and provides no indication that a similar result can be acheived by information-

wise direct hydrophobization of a hydrophilic surface of a lithographic receiver.

We therefore contend that the inventions of claims 1-4, 6-15 and 17-31 cannot be adduced from a combination of the teachings of Leenders et al. and Boston et al. and hence that claims 1-4, 6-15 and 17-31 are patentable under 35 USC §103(a) over Leenders et al. (US 5,501,150) in view of Boston (US 4,223,087).

ALLOWABLE CLAIMS

Claims 5 and 16 were previously objected to as being dependent upon a rejected base claim. Claims 5 and 16 have been amended to independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-32 are pending in the present application. All claims are in condition for allowance and notice thereof is respectfully requested.

Respectfully submitted,

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